

## ABSTRACT

A loop-powered T1 digital radio is coupled to a powered T1 wireline. The radio not only interfaces digital T1 communication signals with the line, but is 5 configured to extract and convert electrical power from the line to voltages necessary for operating the radio. The loop-powered T1 radio transmits and receives RF energy containing the T1 digital communication signals with respect to a remote digital radio, such as a 'blue 10 tooth' type radio.